

## **I. INTRODUCTION**

**Q. Please state your name and company affiliation.**

A. My name is Randy A. Shoop. I am Assistant Treasurer - Finance of Northeast Utilities (“NU”) and other system companies, including Western Massachusetts Electric Company (“WMECO” or the “Company”). I am providing this testimony on behalf of WMECO. My business address is 107 Selden Street, Berlin, Connecticut.

**Q. What are your responsibilities with respect to WMECO?**

A. I am responsible for raising the capital necessary to meet WMECO’s long-term and short-term financial requirements, including the issuance of electric rate reduction bonds, first mortgage bonds, pollution control revenue bonds, notes, lease obligations, preferred equity, common equity and short-term bank notes.

**Q. Have you previously testified in utility regulatory proceedings?**

A. Yes, I have testified on behalf of WMECO before the Department of Telecommunications and Energy (“Department”) regarding the issuance of debt securities, most recently in D.T.E. 00-40, WMECO’s securitization proceeding. I have also testified on behalf of other NU companies in Connecticut and New Hampshire.

## **II. PURPOSE OF TESTIMONY**

**Q. What is the purpose of your testimony?**

A. The purpose of my testimony is to support WMECO's request to issue long-term debt securities ("Long-term Debt") in an amount not to exceed \$105 million in principal during the period October 1, 2002 through December 31, 2003. This Long-term Debt is reasonably necessary for the purpose of refinancing outstanding short-term debt (consisting of revolving credit and system money pool borrowings), and for the financing of WMECO's prior spent nuclear fuel ("PSNF") obligations incurred in connection with WMECO's prior partial ownership of the Millstone nuclear generating stations ("Millstone") in Waterford, Connecticut, as described below. Second, I will explain WMECO's request to enter into interest rate hedging transactions from time to time in connection with any prospective or outstanding short-term or long-term debt. Lastly, I will support WMECO's request that the Department find it to be in the public interest to exempt WMECO from the requirements of M.G.L. c. 164 §§ 15 and 15A in connection with the issuance of the Long-term Debt and interest rate hedging transactions.

**Q. Please describe WMECO's short-term debt.**

A. WMECO has approximately \$81.4 million in outstanding short-term debt that was incurred through revolving credit and system money pool borrowings. Approximately \$50 million of the total outstanding short-term debt reflects WMECO's investment in working capital and construction projects, which has now reached a level and stability where it is essentially used by WMECO as permanent debt.

**Q. What are the advantages of replacing WMECO's outstanding short-term debt with long-term debt?**

A. The replacement of approximately \$50 million of WMECO's current short-term debt with long-term debt offers several advantages to WMECO over carrying this permanent level of short-term debt. For example, reliance on short-term debt for what is essentially permanent capital subjects WMECO to refinancing risk and utilizes available short-term debt capacity, as restricted by the Securities and Exchange Commission and as financial institutions are willing to provide to WMECO to meet its short-term liquidity needs. Issuing Long-term Debt at this time (at rates currently near historic lows) to replace this portion of outstanding short-term debt provides WMECO with an opportunity to capitalize on its improved financial strength.

**Q. Please describe WMECO's PSNF obligations.**

A. Under the Nuclear Waste Policy Act of 1982, WMECO (along with other owners of nuclear generating stations) is required to pay the U.S. Department of Energy ("DOE") for the disposal of spent nuclear fuel and high-level radioactive waste. The DOE is responsible for the selection and development of repositories for, and the disposal of, spent nuclear fuel and high-level radioactive waste. For nuclear fuel used to generate electricity prior to April 7, 1983, an accrual of approximately \$48 million has been recorded on WMECO's books for the spent fuel liability relating to its ownership of Millstone ("PSNF liability") and payment must be made to the DOE prior to the first delivery of such prior spent fuel to the DOE. The DOE has not yet finalized its plans for the disposal of spent nuclear fuel and accordingly has not yet required shipment of such fuel or payment of such PSNF liability.

**Q. How has the sale of WMECO's interest in Millstone affected the PSNF liability?**

A. In March 2001, as a result of the sale by WMECO of its interest in Millstone to a subsidiary of Dominion Resources, Inc. ("DRI"), DRI assumed WMECO's PSNF liability. The DOE consented to this assumption, so WMECO is no longer directly obligated to the DOE for the PSNF liability. However, under the terms of the purchase and sale agreement between WMECO (and the other joint owners) and DRI, WMECO is required to reimburse DRI for WMECO's share of PSNF liabilities required to be paid by DRI to the DOE at the time the DOE requests such payment. As a result, WMECO still maintains an amount equal to the PSNF liability on its books, although the liability is now to DRI and not to the DOE.

**Q. What is the current amount of the PSNF liability?**

A. The PSNF liability represents a fixed obligation that continues to accrue interest at the 3-month treasury bill yield rate until payment is required to be made. The current liability including accrued interest, as of June 30, 2002, is approximately \$48 million, all of which has been included in customers' rates. Furthermore, customers' rates will continue to reflect accrued interest at the 3-month treasury bill rate until payment is required to be made to DRI.

**Q. What are the benefits to WMECO of financing the PSNF liability?**

A. Financing the PSNF liability and removing WMECO's obligation from the financial statements in the manner described below provides WMECO primarily with two benefits. First, WMECO believes it is desirable to settle the PSNF liability at this time as it no longer actively participates in the nuclear energy industry. With the sale of its ownership of Millstone, WMECO is no longer involved in the power generating industry. Second, the issuance of the Long-term Debt and the use of the proceeds to remove the PSNF obligation from WMECO's financial statements will also allow WMECO to better align its rate-making capitalization with capitalization that determines its credit quality, as measured by credit rating agencies.

**Q. Please describe how the rate-making capitalization and rating-agency capitalization are currently misaligned.**

A. For rate making purposes the PSNF liability is not included as debt in calculating capitalization. For rating-agency purposes, however, the PSNF liability is included as debt. The different manners in which the PSNF liability is treated results in an inappropriate capitalization ratio for WMECO for rate-making purposes with a debt to total capitalization ratio of approximately 26% when compared to a debt to total capitalization ratio of 55% for rating-agency purposes, as of June 30, 2002.

**Q. How is this misalignment adversely affecting WMECO?**

A. Prior to the restructuring process, this difference in methodology did not create any material discrepancies because WMECO's overall rate base was much larger than it currently is and it was able to maintain rate-making and rating-agency capitalization structures that were

generally equal on a return on equity basis. However, now that WMECO has divested of its generation assets and its remaining rate base is much smaller than it was in the past, the different treatments of the PSNF liability results in a sizable mismatch between the rate-making and rating-agency capitalization ratios. Specifically, the rate-making capital structure reflects a debt to total capitalization ratio that is much too low (26%) and not reflective of the proper capitalization for WMECO. Total debt as a percentage of total capitalization for WMECO is targeted in the 55% to 60% range, consistent with levels needed to maintain current BBB+/A3 senior unsecured credit ratings.

**Q. Please describe how aligning the rate-making capitalization and rating-agency capitalization will benefit WMECO.**

A. WMECO is in the midst of transitioning to a transmission and distribution company and believes it is necessary to correct the capitalization mismatch by issuing the Long-term Debt to fund a trust (as described below) which would remove WMECO's PSNF liability. This transaction will move WMECO closer to the completion of the restructuring process and start to realign its capital structures to a more appropriate debt/equity relationship. Accordingly, WMECO's rate-making debt to total capitalization ratio would shift from approximately 26% to 51%, a ratio more appropriately aligned with the 55% rating-agency debt to total capitalization ratio.

This realignment is financially important to WMECO because its current rates reflect an equity investment that is significantly lower than its actual equity ratio. In addition, WMECO is providing customers with a "credit" for any restructuring-related rate base deductions based on

its actual capital structure. Financing the PSNF liability with Long-term Debt will reduce the return applied to the rate base deductions. Likewise, for rate-making purposes, the PSNF liability will no longer be a reduction to rate base and the Long-term Debt will be included in the cost of capital calculation.

**Q. What are the benefits to customers of financing the PSNF liability?**

A. This transaction will decrease WMECO's weighted average cost of capital, thereby minimizing future charges to WMECO's customers resulting from reduced revenue requirements.

**Q. Please describe how WMECO would use the proceeds of the Long-term Debt issuance to remove the PSNF liability from the financial statements?**

A. To remove WMECO's PSNF liability, WMECO proposes using an amount of the proceeds from the issuance of the Long-term Debt equal to (or less than, if DRI agrees to a discounted amount) the then current PSNF liability to establish and fund an irrevocable, independent trust which would name DRI as the beneficiary and owner of these funds. WMECO's obligation to DRI for the PSNF liability would be satisfied in full by the funding of this trust. Any increase or decrease in the amount due to the DOE from the amount calculated in accordance with the Nuclear Waste Policy Act of 1982 would become the obligation or benefit of DRI. A properly established trust agreement would provide the required accounting documentation to remove both the trust fund and current PSNF liability from WMECO's financial statements.

**Q. Please describe the major characteristics of the trust fund.**

A. Characteristics of the trust are expected to include the following:

(a) the trust will be operated through an agreement with an independent trustee, a large, well-rated banking institution.

(b) investment guidelines restricting investment options will be in the trust agreement, and will include only U.S. Government and other high-quality obligations.

(c) investment direction will be the responsibility of DRI, pursuant to guidelines in the trust agreement.

(d) WMECO would not be permitted to withdraw funds from the trust and would not have the right to liquidate the trust to retrieve the funds deposited with the trust.

(e) earnings from the investments of capital in the trust would be targeted to equal or exceed the required DOE accrual obligation.

**Q. What will happen if the DOE determines that it will not require the funds or reduces the amount payable?**

A. In WMECO's proposal to DRI, in the event that the DOE determines that it will not require the funds, the trust would be dissolved, funds equal to WMECO's initial contribution to the trust plus interest accrued at the three-month treasury bill rate would be returned to WMECO, and any and all of WMECO's PSNF liability would be extinguished.



**Q. What if the settlement amount is reduced?**

A. It is proposed that if the amount that is owed to DRI at the time the DOE requests the funds is reduced by any settlements negotiated by DRI on behalf of WMECO, the additional amount of WMECO's initial contribution plus interest accrued at the three-month treasury bill rate that exceeds the settlement amount will be returned to WMECO, and any and all of WMECO's PSNF liability will be extinguished.

**Q. What if there is a shortfall in funds at the time the trust is dissolved?**

A. It is proposed that at the time that the trust is dissolved and the required funds are remitted to DRI, any shortfall in the earnings as compared to the required DOE accrual obligation will be the responsibility of DRI. WMECO would not be required to deposit any additional funds into the trust at any time.

**Q. What if the trust earns more than what is required to be paid to the DOE?**

A. At the time that the trust is dissolved and the required funds are remitted to DOE, any incremental amount earned by the trust above the predetermined pre-1983 PSNF liability plus accrued interest will be retained by DRI.

**Q. Is there any circumstance in which WMECO would be required to pay additional funds to DRI for its PSNF liability?**

A. There is no circumstance in WMECO's proposal in which WMECO would owe more than the amount deposited in the trust. This feature of the trust is required in order to properly remove the liability from WMECO from both a legal and accounting perspective.

**Q. How would WMECO proceed if DRI does not agree to the terms of the Trust agreement?**

A. Another alternative that WMECO can pursue is to set up a similarly structured trust funded with the proceeds of the Long-term Debt issuance. In this case, however, WMECO would be listed as beneficiary and owner of the funds. WMECO would only be permitted to access the funds at the time monies are due to make payment to DRI, WMECO would be responsible for any shortfall of funds and would benefit from any excess of funds in the trust at that payment date. The Long-term Debt issued to fund the trust would be recorded on WMECO's financial statements, and the PSNF liability would remain on the financial statements. However, in this scenario, WMECO plans to request that the rating agencies not include the PSNF liability in their calculations of total capitalization and total debt to capitalization, since the PSNF liability would be offset on its books by an asset of an equal amount. Therefore, while WMECO's GAAP accounting books would include the Long-term Debt as well as the PSNF liability, the rating agencies would only consider the Long-term Debt in their capitalization calculation and in their credit rating determinations for WMECO.

### **III. DESCRIPTION OF PROPOSED FINANCING**

**Q. Please describe the Long-term Debt that WMECO is proposing to issue .**

A. To provide the company with the most financing flexibility, WMECO proposes to issue and sell up to \$105 million in aggregate principal amount of Long-term Debt with a maturity ranging from 2 to 30 years. The Long-term Debt may be in the form of secured or unsecured notes, carry either a fixed or floating interest rate, be either insured or uninsured, and be distributed to either retail or institutional investors.

**Q. What are the primary differences between retail and institutional debt?**

A. Retail debt, unlike institutional debt, is primarily distributed to individual investors rather than to financial institutions, is listed on the New York Stock Exchange, sells at \$25 par value compared to \$1,000, pays interest quarterly, can be called at par value after 3-5 years, and requires SEC registration.

**Q. Are there advantages to issuing retail debt as opposed to institutional?**

A. Depending on current market conditions there may be interest-rate advantages associated with a retail debt issue compared to an institutional issue. Retail investors tend to focus on absolute yield, name recognition, payment frequency, and liquidity rather than on relative value and spread as compared to the institutional market and, as a result, are less reactive to changes in market conditions. Consequently, retail market coupon rates may be lower than those in the institutional market in a rising-rate environment.

**Q. Is there a significant difference in upfront costs between retail and institutional debt?**

A. Since greater effort is required by participating managers to distribute the notes to a large retail investor group (rather than a few financial institutions), underwriting fees are significantly higher in the retail market (3.15% compared to 0.625%). After considering both the coupon rate and underwriting fees, the all-in costs between the retail and institutional markets are generally comparable, with differences attributed to the lag in the responsiveness of the retail market mentioned above. WMECO will consider the market conditions at the time of issuance when determining whether it will issue retail or institutional debt.

**Q. Are there any other advantages to issuing retail debt as opposed to institutional debt?**

A. Another potential advantage of retail debt is the ability of the issuer to call the debt securities at par. Conversely, in the institutional market, the debt securities may not be redeemable, or may only be redeemed at very costly make-whole rates, which are designed to penalize the issuer for redeeming the debt securities prior to maturity. Additionally, the call option in the retail debt reduces the refinancing risk for the debt securities since any amount of the debt securities can be called at par anytime after an initial agreed-upon period (typically 3-5 years). Other cost advantages may exist by securing the debt securities with either a mortgage or negative pledge, or by obtaining financial assurance from a AAA-rated insurance provider.

**Q. Please describe the advantages associated with securing the debt with a mortgage or obtaining insurance.**

A. With both alternatives, security holders are willing to accept a lower coupon payment in exchange for additional security. WMECO will consider the market conditions at the time of issuance when determining whether it is advantageous to secure the debt securities with a mortgage or negative pledge and/or obtain insurance.

**Q. How are market conditions evaluated?**

A. Market conditions, which consist of various economic and industry factors, determine the coupon rate of debt by influencing treasury yields and credit spreads. WMECO utilizes several resources to assess market conditions. First, WMECO draws on the knowledge and experience of its investment banks to estimate the pricing of available financing alternatives. Second WMECO analyzes data from various financial and industry sources to draw its own conclusions regarding credit spreads, interest rates, issuance costs, and other economic factors.

**Q. What is the estimated coupon rate for the proposed issuance given current market conditions?**

A. Based upon current market conditions, the estimated fixed-coupon rates range from 4.10% (2-year institutional secured debt) to 7.25% (30-year retail unsecured debt). These rates reflect credit spreads ranging from 125 to 175 basis points, given 2-year and 30-year treasury rates (2.85% and 5.50%, respectively). Floating-coupon rates range from 1.96% (2-year note) to 2.06% (3-year note), reflecting credit spreads ranging from 10 to 20 basis points above current LIBOR rates (1.86%). In addition to market conditions, estimates depend on

the maturity, security and/or financial assurance and whether the debt is offered to institutional or retail investors.

**Q. What other fees are associated with the issuance?**

A. The following table lists the maximum expected fees associated with the issuance:

Fee	Amount
Underwriting Fees (1)	\$3,307,500
Insurance	\$4,000,000
Rating Agencies	\$120,000
Legal (2)	\$80,000
Printing/Misc.	\$25,000
<b>Total (3)</b>	<b>\$7,532,500.00</b>

(1) Underwriting fees are based upon a 3.15% retail commission on a \$105,000,000 issuance. Underwriting fees for an institutional offer are estimated to be \$659,375 based upon a 0.625% commission.

(2) Legal fee is based upon a secured debt issuance, and would be similar for either retail or institutional offers; fees for an unsecured issuance are estimated to be \$50,000.

(3) Insurance costs are not a mandatory expense since debt insurance is an option that may or may not be utilized, depending on market conditions. Total debt expenses without insurance would equal \$3,532,500.

The higher fees associated with retail underwriting, mortgage security, and debt insurance must be weighed against the lower potential all-in costs due to the lower coupon rate of interest. For example, adding insurance to a debt issue could decrease coupon rates by up to 90 basis points depending on market conditions, resulting in annual interest expense savings of up to \$945,000 for a \$105,000,000 debt issue. In this scenario, benefits from the annual savings would outweigh the \$4,000,000 premium.

**Q. How does WMECO plan to use the proceeds of the Long-term Debt issuance?**

A. WMECO proposes to use the proceeds from the issuance of the Long-term Debt for three purposes: (i) to replace a portion of outstanding short-term debt, (ii) to fund an irrevocable trust account for the retirement of its PSNF liability, and (iii) to pay for issuance costs.

**Q. When does WMECO need the Department approval to issue long-term debt?**

A. WMECO respectfully requests that the Department issue an order approving the issuance of long-term debt as soon as possible to capitalize on the current historically low interest rate environment.

#### **IV. ISSUANCE OF DERIVATIVES/INTEREST RATE HEDGES**

**Q. What is a derivative instrument?**

A. A derivative is a financial instrument whose value is derived or dependent upon the value of another financial instrument such as interest rates. These instruments are commonly used as hedging tools to optimize an entity's financial position by reducing earnings volatility, minimizing loss, and managing exposures and/or risk.

**Q. What types of derivative instruments will be used as Hedges?**

A. Hedges will involve the use of financial instruments commonly used in the capital markets, such as interest rate swaps, treasury-rate locks, caps, collars, floors, and other similar appropriate instruments more fully discussed below.

**Q. Please explain WMECO's request to enter into interest rate hedging transactions.**

A. WMECO requests authorization to enter into Hedges in order to reduce earnings volatility, minimize loss, and manage exposures and/or risk in connection with the Long-term Debt requested in this application as well as with any other currently issued or to-be-issued short-term or long-term debt.

**Q. Why does WMECO need the authority to enter into Hedges?**

A. WMECO would like the authority to enter into Hedges primarily for three reasons. First, Hedges allow WMECO to capitalize on changing interest-rate environments by locking-in interest rates in anticipation of future planned debt issuances when interest rates are low. Second, Hedges allow WMECO to guard against rising interest rates associated with outstanding floating debt. Third, Hedges provide WMECO the flexibility to better manage its fixed/floating debt position without issuing new debt.

**Q. How would WMECO lock-in interest rates in anticipation of a future planned debt issuance?**



A. WMECO could use several derivative instruments to lock-in the interest rate of a planned debt issuance, such as a forward swap or a treasury lock. A treasury lock protects against adverse movements in the underlying U.S. treasury rate that will be used to price a future WMECO debt issuance. By locking-in the U.S. treasury rate in advance of the debt issuance, WMECO can eliminate risk associated with a rising interest-rate environment. Conversely, if rates were to fall even further, WMECO would be exposed to higher rates.

**Q. Does a treasury lock allow WMECO to fix the total coupon rate for an anticipated debt issuance?**

A. No, a treasury lock only fixes the treasury rate component of the coupon rate for the note issuance. A credit spread will be added to the treasury rate to determine the actual coupon rate at issuance.

**Q. Has WMECO ever entered into a treasury lock or interest-rate swap?**

A. WMECO has not entered into either a treasury lock or interest-rate swap since such a transaction would require authorization from the Department. However, treasury locks have been used before by NU and its unregulated subsidiaries. Most recently, NU utilized treasury locks on the issuance of \$263 million of notes, resulting in a favorable rate for NU. The hedge was established over a one-month period and was executed using three separate treasury locks allocated between two different counterparties.

**Q. Please provide an example of a treasury lock.**

A. Assume that WMECO plans to issue 10-year notes in three months time (“issue date”). Further assume that the current 10-year U.S. treasury rate is at a favorable 5.0%. Given the recent volatility in the capital markets, WMECO would like to guard against the treasury rate increasing between now and the issue date. WMECO could do nothing, and price the notes using the prevailing 10-year U.S. treasury rate at the issue date, exposing it to significant uncertainty and interest-rate risk. Alternatively, WMECO could enter into a treasury lock with a counterparty to lock in today’s favorable treasury rate (“lock-rate”). Assuming that WMECO enters into an agreement at today’s 5.0% lock-rate and that the treasury rate increases to 5.40% on the issuance date, then WMECO has effectively saved 40 basis points by entering into the agreement. The savings is an “effective” savings since the coupon rate on the issuance date is priced based upon the actual 5.40% treasury rate, but a payment is made by the hedging counterparty that compensates WMECO for the 40 basis point difference between the actual treasury-rate and the lock-rate (more fully discussed below).

**Q. In the above example, what happens if rates decrease rather than increase on the issuance date?**

A. Once a treasury lock is executed with a counterparty, WMECO is locked into that rate. If the 10-year U.S. treasury rate decreases to a rate lower than the lock-rate at the issue date, then WMECO would pay a higher effective rate than it would have had it not entered into the transaction. However, in such a scenario, WMECO would have locked-in at a rate that was considered favorable at the time and simultaneously removed the uncertainty associated with the debt issue.

**Q. How is the transaction structured to lock-in the rate?**

A. To enter into a treasury lock transaction, WMECO must first determine a reference treasury based upon the upcoming debt issuance (e.g., 10-year reference treasury for a 10-year debt issuance). Next the issuance date is determined, which also becomes the settlement date for the treasury lock. On the date that the transaction is entered, the lock-rate is based upon the current reference treasury rate. On the settlement date, which is the date that WMECO issues its note, a payment is made depending on the difference in the lock-rate and the treasury rate. If rates increase during the interim period, WMECO receives cash from the counterparty. The cash amount is equal to the present value of the difference in cash flows of the planned note issuance at the lock-rate and treasury rate. If rates decrease, WMECO pays cash to the counterparty calculated in the same manner. Hedge accounting then allows the gain/(loss) from this transaction to be amortized over the life of the note, which reduces/(increases) the effective debt rate. Without hedge accounting treatment, the gain/(loss) from the transaction would be realized immediately in earnings rather than over the life of the note.

**Q. What is hedge accounting?**

A. “Hedge Accounting” is an accounting treatment that falls under the Financial Accounting Standards Board’s SFAS 133- Accounting for Derivative Instruments and Hedging Activities. SFAS 133 requires an entity to recognize all derivatives as either assets or liabilities on its balance sheet, and to mark-to-market the derivative (i.e., recognize the derivatives at fair value) on at least a quarterly basis. Any gain or loss associated with a change in fair value must

immediately be recognized in earnings unless hedge accounting treatment is allowed. Hedge accounting is allowed if certain conditions are met, depending on the instrument used and the exposure being hedged.

**Q. What conditions must be met in order to receive hedge accounting for a treasury lock?**

A. In order to receive hedge accounting for a treasury lock, WMECO must designate the treasury lock as one that hedges the cash flows associated with a known and likely debt issuance. The accounting procedures related to SFAS 133 and hedge accounting in particular are rather complex, however WMECO has sufficient expertise in its accounting function to assure that SFAS guidelines are met and that hedge accounting is achieved with regard to derivative transactions.

**Q. What is the cost of the treasury lock?**

A. There is no upfront cost to enter into a treasury lock; however, a transaction fee (usually 1 to 2 basis points) is added to the lock-rate.

**Q. How would WMECO use derivatives to guard against rising interest-rates associated with outstanding floating debt?**

A. WMECO could use several derivative instruments to guard against rising interest-rates associated with outstanding floating debt, one of which is to purchase an interest-rate cap. An interest-rate cap is an agreement between two parties in which the seller (counterparty) of the

cap agrees to pay the buyer (WMECO) a rate equal to any excess between the current floating rate and a pre-determined rate, called the strike price. Payment will be made as long as the prevailing interest-rate exceeds the strike price. For example, if WMECO and the counterparty agree on a strike price of 5% and the current floating rate is 6%, the counterparty would pay WMECO 1% interest on the principal amount of the agreement. As long as the principal amount of the agreement is equal to the principal amount of the debt, the cap will effectively limit WMECO's interest expense to the strike price of the agreement.

**Q. What is the cost of an interest-rate cap?**

A. WMECO must make a premium payment to the counterparty when the agreement is initiated. As in an insurance policy, the premium reflects the risk that the counterparty takes and payments that it expects to make to WMECO if interest rates remain high throughout the life of the underlying debt.

**Q. How would WMECO use derivatives to manage its fixed/floating position?**

A. WMECO could utilize several derivative instruments to manage its fixed/floating position, one of which is an interest-rate swap. An interest-rate swap is a derivative instrument that allows an entity to synthetically swap a fixed obligation to a floating obligation, (or vice-versa) by entering into a contractual agreement with a counterparty that takes the opposite side of the position. The floating side of the swap is based upon LIBOR rates, plus a credit-spread that is determined when the swap is initiated. The credit-spread is obtained by identifying the applicable swap-rate, and then subtracting the swap-rate from the coupon rate of the note

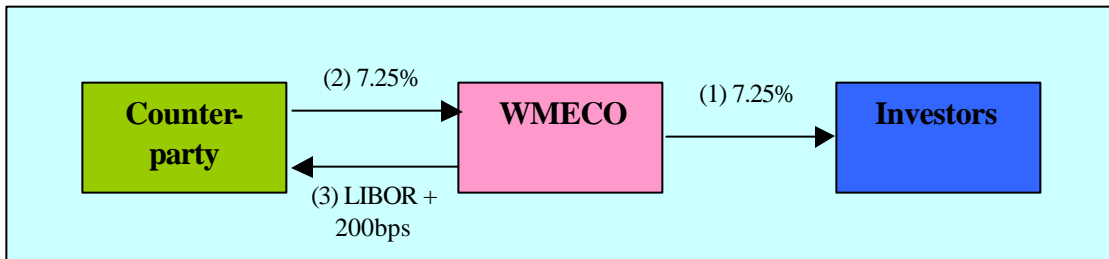
issuance. The swap rate is calculated by the hedge counterparty, and represents a fixed interest-rate that couples a treasury-rate plus a swap spread, which represents the credit risk of the financial market compared to the risk-free treasury rate. For example, if the 10-year treasury is 4.75% and the 10-year swap spread is 0.50%, the swap rate would equal 5.25%.

**Q. Please provide an example of an interest-rate swap.**

A. The example assumes that on the day the swap is initiated, WMECO has an existing 10-year note issue with a 7.25% coupon and no coupon payments have been made, the prevailing LIBOR rate is 2.25%, and the swap rate is 5.25%. Based on these assumptions, the fixed spread over LIBOR that WMECO must pay semi-annually throughout the 10-year period is 2.0%, which is determined by subtracting the swap-rate from the coupon rate (7.25% minus 5.25%). The LIBOR rate (2.25%) and fixed spread (2.00%), which are set when the swap is initiated, become the floating payment (4.25%) that WMECO must make at its first coupon date. Note that the spread will always be 2.00% throughout the term of the swap, however LIBOR resets at every coupon payment date for payment at the subsequent coupon date.

Continuing with the above example, the following diagram shows the simultaneous transactions (payments) that occur on each coupon date to realize the synthetic floating effects of the swap.

#### Swap Steps (Payments) on Each Coupon Payment Date



(1) WMECO makes the 7.25% interest payment to investors as scheduled.

(2) The swap counterparty makes an offsetting 7.25% interest payment to WMECO.

(3) WMECO then makes a second payment back to the counterparty in an amount equal to LIBOR (as determined the period before) plus the 2.00% fixed spread (set when the swap is initiated). Recall that for the first coupon payment, WMECO's total interest payment would be 4.25% (2.25% LIBOR plus the 2.00% spread). Since the two 7.25% interest payments cancel each other out, the effective interest paid by WMECO each coupon period is LIBOR plus the 2% fixed spread. WMECO continues to make a LIBOR plus 2.00% payment semiannually for the next 10 years when the swap terminates.

**Q. Can WMECO terminate the swap agreement before its expiration date if LIBOR rates continue to increase over the life of the swap?**

A. WMECO can terminate the swap before its expiration date for any reason, in which case there will be a cash inflow or outflow that is dependent on the then-current value of the swap.

**Q. What is the cost of an interest-rate swap?**

A. There is no upfront cost for the type of swap discussed above, however, a small spread between the bid/ask price of interest rate swap is factored into the effective cost of the swap (typically 1 to 2 basis points). Important to note is that some other types of derivative instruments may be structured to require upfront payments such as can be the case in interest-rate caps and collars.

**Q. What is the accounting treatment for the swap?**

A. Interest-rate swaps must be reported according to SFAS 133 accounting standards, which requires regular mark-to-market valuations and recognition of any gain or loss associated with the swap immediately in earnings. If special hedge accounting treatment is allowed, an entity may offset this earnings gain/loss with the change in value of the hedged exposure (which should be exactly the opposite of the change in the derivative value), resulting in a zero net effect on earnings.

**Q. What conditions must be met in order to receive hedge accounting for a swap?**

A. SFAS 133 stipulates several complex conditions and procedures necessary to achieve hedge accounting, and the conditions differ depending on whether an entity is swapping from



fixed-to-floating, or floating-to-fixed. For floating-to-fixed swaps, hedge accounting is granted if the hedged risk is based on LIBOR, fixed and floating indices are constant, no upfront payments are made, the re-pricing date and floating indices match, and any caps, floors, and options in the debt are comparable to those in the swap. Similar conditions are necessary for fixed-to-floating swaps, with the additional condition that the maturity of the swap and notes match.

**Q. Are there any additional opportunities for WMECO to utilize derivative instruments?**

A. Yes, the examples above were meant to provide the Department with a general understanding of derivatives. Many opportunities can be explored with the use and flexibility of derivatives.

**Q. Can WMECO use derivatives to manage interest-rate risk associated with a retail debt issue?**

A. Yes, WMECO can use swaps to manage interest-rate risk associated with a retail debt issue. As described earlier in this testimony, retail debt would provide the ability for WMECO to call the debt after some initial period (typically 3-5 years). The retail structure provides WMECO the opportunity to monetize this call option by entering into a swap transaction. Since any swap on retail debt must contain a call option in order to achieve hedge accounting (see conditions in previous question), WMECO would incorporate an option into its swap

agreement that gives the counterparty the right to cancel the swap anytime after 3-5 years. In addition to receiving hedge accounting treatment, WMECO also receives a financial benefit reflected in a lower fixed or floating rate spread equal to the amortized monetary value of the option (approximately 40 to 50 basis points). Given the fixed-to-floating example above, where WMECO paid LIBOR plus 200 bps on each payment date, monetizing the option would result in WMECO paying LIBOR plus 160 bps, assuming an option value of 40 bps.

**Q. Have other state regulators allowed the use of derivative instruments?**

A. Both the Department of Public Utility Control (“DPUC”) and the New Hampshire Public Utility Commission (“NHPUC”) have allowed the use of derivative instruments. A 1997 DPUC order that allowed Connecticut Light and Power (“CL&P”) to use derivatives expired in December 2001; however, CL&P is in the process of preparing a filing with the DPUC to extend that authorization. A 2001 NHPUC order also allowed the Public Service Company of New Hampshire to enter into derivative instruments for purposes of managing interest-rate risk and fixed/floating positions. The Department, in D.P.U. 91-267, has also authorized the issuance of interest rate swaps in limited circumstances.

**Q. Does WMECO have any risk management policies and procedures in place to manage derivative instruments and to help mitigate losses and risk?**

A. NU is in the process of finalizing interest-rate risk management policies and procedures that will govern WMECO’s use of derivatives.

**Q. What are the scope and objectives of the policy and procedures?**

A. The interest rate risk management policies and procedures were developed by the NU Treasury Department to establish specific market instruments and parameters used in managing financial risks related to interest-rate movements. The objective is to actively manage selected interest-rate risks through the use of derivative transactions. With active management and compliance with these procedures, the goal is to use hedging instruments to reduce earnings volatility, lower costs, minimize losses, manage exposures / risk, and meet or exceed budget estimates.

**Q. What are the roles and responsibilities of the senior management with respect to these policies?**

A. The Chief Financial Officer (“CFO”) of NU has the ultimate responsibility and authority for all risk management practices throughout the NU System, and will report on these procedures to the Chief Executive Officer and to the NU Board or any Committee of the NU Board, and/or to the boards of directors of each subsidiary, at such times and in such manners as each such Board or Committee shall request. The CFO must also promptly notify the NU Board (or any designated Committee) regarding:

- 1) Material adverse changes in the amount or kind of risk incurred by the NU System as a whole,
- 2) Material proposed or actual changes in these procedures, and
- 3) Material breaches or violations of these procedures.

The CFO will also review and approve these procedures on an annual basis.

The Vice President and Treasurer will oversee and authorize execution of risk management transactions by the Treasury Department. In doing so, the Vice President and Treasurer will establish, and to the extent required or to the extent deemed appropriate, shall seek senior management approval for risk management parameters regarding fixed / floating positions, notional amounts, risk tolerance levels, underlying exposures to be hedged, exposure/hedge ratio, hedging instruments, maturities, International Swap and Derivatives Association (“ISDA”) counterparties, and the list of authorized risk-management personnel.

**Q. Who is responsible for monitoring exposures and performance of hedge positions?**

A. The Treasury Department of NU will be responsible for monitoring all hedge positions under the Vice President and Treasurer and will review such positions on at least a monthly basis or as significant changes to hedged positions occur. Reporting items will include marking-to-market all hedge contracts’ cash flows on related swap transactions, market trends for underlying interest rates, swap strategies and management techniques, fixed / floating positions, exposure / hedge ratio, maturities, and ISDA counterparties and their credit ratings.

**Q. With which counterparties will WMECO enter into interest-rate hedging transactions?**

A. Hedges would only be entered into with counterparties whose senior unsecured debt ratings, or the senior unsecured debt ratings of the parent companies of the counterparties, as published by Standard and Poor's Ratings Group, are equal to or greater than A, or an equivalent rating from Moody's Investors Service or Fitch Ratings. Additionally, all transactions will be documented utilizing industry standard ISDA contracts.

**Q. What limitations will WMECO impose with respect to the notional amount and maturity of Hedges?**

A. The stated aggregate notional amount of Hedges issued by WMECO will not exceed the amount of the underlying debt on the company's balance sheet, and the maturity of the Hedges will not exceed the stated maturity of the underlying debt.

**Q. How will WMECO ensure that fees and costs associated with hedging are competitive?**

A. Transaction fees, commissions and other amounts payable to the counterparty or exchange (excluding, however, the swap or option payments) in connection with a Hedge will not exceed those generally obtainable in competitive markets for parties of comparable credit quality.

**Q. How will these fees, as well as swap and option payments be treated from a rate-making standpoint?**

A. The financial impact of the derivatives, if any, will be excluded from the Company's calculations for ratemaking and reconciliation purposes.

**Q. Does WMECO plan on entering into a hedge transaction related to the planned issuance of the Long-term Debt described in this application?**

A. Assuming WMECO is granted permission to enter into interest-rate hedging instruments, it may or may not enter into such a transaction with respect to the Long-term Debt issuance described in this application, depending on market conditions at the time of issuance as well as expected throughout the life of the issuance.

**V. EXEMPTION FROM M.G.L. C. 164 §§15 AND 15a**

**Q. Why is WMECO seeking an exemption from M.G.L. C. 164 §§15?**

A. WMECO respectfully requests that the Department waive the requirement in M.G.L. c. 164 §15, which would otherwise require WMECO to invite proposals for the Long-term Debt issuance and for the Hedges by advertisements in certain newspapers specified in that section. It would be in the public interest for the Department to grant such an exemption because there is already a measure of competition in the Company's solicitation of various investment bankers with broad experience in the debt markets and access to potential investors. In addition, an exemption is in the public interest because such an exemption provides WMECO with the ability to respond quickly to changes in market conditions and to facilitate the use of a variety of pricing mechanisms and take full advantage of market conditions and obtain maximum attention from potential investors. Requiring competitive bidding pursuant to §15 could jeopardize the

flexibility sought in these transactions, and ultimately jeopardize the financial benefits available to customers under this placement process. Therefore, the benefits one would expect from publication and competitive bidding are largely inapplicable in this case and such a process is not likely to yield a more favorable interest rate or more favorable terms on the Long-term Debt or Hedges, but would likely cause the issuance of the Long-term Debt to be more expensive and the entering into Hedges impractical.

**Q. Why is WMECO seeking an exemption from M.G.L. C. 164 §§15A?**

A. WMECO also requests an exemption from the par value requirements of M.G.L. c. 164, § 15A in connection with the issuance of the Long-term Debt. Such an exemption is in the public interest because market conditions may make it difficult for WMECO to price all of its debt at par value and simultaneously offer an acceptable coupon rate to prospective buyers. Investors rely on such discounts as a means to refine the price structure of a debt instrument to achieve a desired interest rate. Consequently, a discount provision offers enhanced flexibility that results in placing issuances with prospective investors at a market-based interest rate. In addition, an exemption from the requirements of M.G.L. c. 164 § 15A is in the public interest because it will enhance WMECO's flexibility in entering the market quickly to take advantage of prevailing interest rates. Such flexibility could benefit WMECO's customers in the form of lower interest rates and a lower cost of capital.

**II. NET PLANT TEST**

**Q. Does WMECO meet the Department's net plant test?**

A. WMECO meets the Department's net plant test. As of June 30, 2002, WMECO's net utility plant, utility plant less accumulated depreciation and less construction work in progress, \$399,212,000, is equal to or in excess of the sum of its outstanding stock (common and preferred, not including retained earnings) and long-term debt (not including the PSNF liability) of \$134,531,000. After giving effect to the issuance of the Long-term Debt and the concurrent reduction of a like amount of the PSNF liability on WMECO's books, as proposed, WMECO will still meet the Department's net plant test as the sum of its outstanding stock and long-term debt will be \$239,531,000.

**Q. Does this conclude your testimony?**

A. Yes, it does.